### REMARKS

This Application has been carefully reviewed in light of the Office Action mailed June 24, 2005. At the time of the Office Action, Claims 1-11, 13-18 and 20 were pending in this Application. Claims 1-11, 13-18 and 20 were rejected. Claims 12 and 19 were previously cancelled without prejudice or disclaimer. Claims 1, 13 and 18 have been amended to further define various features of Applicants' invention. Applicants respectfully request reconsideration and favorable action in this case.

#### Rejections under 35 U.S.C. §103

#### Claims 1-3, 6, 8, 9, 18 and 20

Claims 1-3, 6, 8, 9, 18 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,012,870 issued to Harold W. Dillingham ("870 Dillingham") in view of Reissue Patent No. 36,981 issued to Ralph D. Birtchet ("Birtchet"). Applicants respectfully traverse and submit the cited art combinations, even if proper, which Applicants do not concede, does not render the claimed embodiment of the invention obvious.

In order to establish a *prima facie* case of obviousness, the references cited by the Examiner must disclose all claimed limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). Furthermore, according to § 2143 of the Manual of Patent Examining Procedure, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

Independent Claim 1, as amended, recites a flameless pavement repair system that includes, among other limitations, "a hopper disposed on the vehicle, <u>the hopper having no</u> <u>flame-based heat source associated therewith.</u>" Emphasis added.

Independent Claim 18 recites a method "for heating <u>a hopper having no flame-based</u> <u>heat source</u> in a pavement repair vehicle." Emphasis Added.

As described in the application on page 4, a significant advantage of the present invention is to provide a pavement repair system that can maintain hot mix asphalt a t a desired temperature without involving a flame-less heat source. For instance, eliminating the flame based heat source for heating the hopper increases the safety of the vehicle by eliminating the inherent risk associated a flame-based heat source and in having to carry fuel for such a flame-based heat source.

Examiner cites to Dillingham '870 Dillingham and Birtchet as rendering obvious Claims 1 and 18. '870 Dillingham discloses a portable device for dispensing pavement repair materials. See Col. 1, lines 7-9. '870 Dillingham discloses a heating source for providing a "dry radiant source and a liquid heat transfer source." Col. 3, lines 52-54. More specifically, '870 Dillingham discloses providing burner fired retort tubes 45 and 47 and, additionally, electric immersion heater 59 for providing heat to the mixing chamber. See Col. 3, line 55-Col. 4, line 7. At no point does '870 Dillingham suggest that the system be provided without a flame-based heat source.

Accordingly, '870 Dillingham fails to disclose, teach or suggest a pavement repair system that does not incorporate a flame-based heat source. It is also notable that the provision of a flame-based heat source as a primary heat source at the time of the present invention was the widely accepted manner of heating aggregate or hot mix paving materials in the hoppers of pavement repair vehicles, with electric heating elements being used to heat materials left in the hopper overnight or over the weekend. See '935 Dillingham Col. 3, lines 33-36. Notably, the '935 Dillingham reference discussed below also discloses a heating systems for paving materials that each incorporate a flame-based heat source (propane burner 23 in the prior art Figure 2, Col. 3, lines 25-30 and retort tubes 133 and 135, Col 5, lines 25-30).

The Birtchet reference teaches an electrically heated paving screed. See Col. 4, lines 28-42. However, Birtchet is directed only to heating a screed trailing behind a paving machine and fails to make any disclosure, teaching or suggestion of how to provide heat to a hopper.

For at least these reasons, Applicants submit that the combination of '870 Dillingham and Birtchet fail do disclose, teach or suggest a flameless paving system (or method of use thereof) as recited in Independent Claims 1 and 18. Applicants respectfully request reconsideration, withdrawal of the §103 rejections and full allowance of Claims 1 and 18 and Claims 2-3, 6, 8, 9 and 20 which depend therefrom.

#### Claims 4, 5 and 7

Claims 4, 5 and 7 were rejected under 35 U.S.C. §103(a) as being unpatentable over 870 Dillingham and Birtchet as applied to Claim 1, and further in view of U.S. Patent No. 5,988,935 issued to Harold W. Dillingham ("935 Dillingham"). Applicants respectfully traverse.

'935 Dillingham discloses a hopper for pavement repair materials that includes, among other elements retort tubes powered by a propane burner. See Col. 5, lines 25-30. Accordingly, like '970 Dillingham and Birtchet as discussed above, '935 Dillingham also fails to disclose teach or suggest heating a hopper for pavement repair materials that does not include a flame-based heat source.

Accordingly, Applicants submit the Claims 4, 5 and 7 depend from Claims that have been placed in condition for allowance and that the inclusion of the '935 Dillingham also fails to render obvious. Applicants request reconsideration, withdrawal of the §103 rejections and full allowance of Claims 4, 5 and 7.

## Claims 10 and 11

Claims 10 and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over 870 Dillingham and Birtchet as applied to Claim 1, and further in view of U.S. Patent No. 5,419,654 issued to Scott P. Kleiger ("Kleiger"). Applicants respectfully traverse.

As discussed above, '870 Dillingham and Birtchet fail to disclose, teach or suggest a hopper that does not include a flame-based heat source. Kleiger discloses a pavement repair vehicle that includes a separate gravel hopper 16 and asphalt tank 20. See Figures 1 and 1a, Col. 4, lines 57-59. Gravel and heated asphalt are mixed at the time of use. See Col. 2, lines 60-65. Kleiger teaches a method for maintaining the asphalt tank 20 at a desired temperature. Col. 2, lines 5-23. However, Kleiger fails to provide any disclosure, teaching or suggestion of heating a hopper or of heating aggregate materials as recited in Independent Claim 1 (from which Claims 10 and 11 depend).

Accordingly, Applicants submit that Claims 10 and 11 depend from Claims that have been placed in condition for allowance and that the addition of the Kleiger reference also fails to render such Claims obvious. Applicants respectfully request reconsideration, withdrawal of the §103 rejections and full allowance of Claims 10 and 11.

# Claims 13 and 15-17

Claims 13 and 15-17 were rejected under 35 U.S.C. §103(a) as being unpatentable over '870 Dillingham and Birtchet in view of Kleiger. Applicants respectfully traverse and submit the cited art combinations, even if proper, which Applicants do not concede, does not render the claimed embodiment of the invention obvious.

Independent Claim 13, as amended, recites a "flameless hopper assembly for providing hot-mix asphalt for a pavement repair vehicle without a flame-based heat source."

For the reasons discussed above, the cited reference fail to disclose each and every limitation of Independent Claim 13. Namely, none of the cited references teaches or suggests the hopper for providing hot-mix asphalt that does not require a flame-based heat source. The hopper of '870 Dillingham requires a flame-based heat source, Birtchet provides no teaching with respect to the heating of a hopper and the hopper of Kleiger is not heated. Accordingly, Applicants respectfully request reconsideration, withdrawal of the §103 rejections and full allowance of Claim 13 and Claims 15-17 which depend therefrom.

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## <u>Claim 14</u>

Claim 14 was rejected under 35 U.S.C. §103(a) as being unpatentable over 870 Dillingham, Birtchet and Kleiger as applied to Claim 13 above, and further in view of 935 Dillingham. Applicants respectfully traverse and submit that, for the reasons discussed above, Claim 14 depends from an Independent Claim that has been placed in condition for allowance, thereby obviating the present rejection. Applicants request reconsideration and full allowance of Claim 14.

CONCLUSION

Applicants have now made an earnest effort to place this case in condition for allowance in light of the amendments and remarks set forth above. Applicants respectfully request reconsideration of Claims 1-20 as amended.

Applicants believe there are no fees due at this time, however, the Commissioner is hereby authorized to charge any fees necessary or credit any overpayment to Deposit Account No. 50-2148 of Baker Botts L.L.P.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicants' attorney at 512.322.2548.

Respectfully submitted, BAKER BOTTS L.L.P. Attorney for Applicants

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